

# PARSONS

## Mobilization/Kickoff SH&E Meeting Form

<b>Date:</b>	<b>Project/Location:</b>
<b>Parsons Representative:</b>	<b>Subcontractor Representative:</b>

The following project site safety, health, security, and environmental requirements, procedures, and hazards have been identified and reviewed with the subcontractor:

Mark with "X"	Item	Mark with "X"	Item	Mark with "X"	Item
<input type="checkbox"/>	Air Pollution and Emissions	<input type="checkbox"/>	Fall Protection, Guardrails, and/or Scaffolding	<input type="checkbox"/>	Personal Protective Equipment
<input type="checkbox"/>	Asbestos			<input type="checkbox"/>	Process Safety Management (PSM)
<input type="checkbox"/>	Buried Items				
<input type="checkbox"/>	Competent / Qualified Person	<input type="checkbox"/>	Fire Protection	<input type="checkbox"/>	Protected Ecological and Cultural Resources
<input type="checkbox"/>	Confined Spaces (Permit / Non-Permit)	<input type="checkbox"/>	Hazardous Materials and Wastes	<input type="checkbox"/>	Resource Conservation and Sustainability
<input type="checkbox"/>	Cranes / Hoists / Annual Inspection Certificate(s)	<input type="checkbox"/>	Hot Work, Welding, and/or Cutting	<input type="checkbox"/>	Site Security, Visitor Control, and Public Exposure
<input type="checkbox"/>	Demolition	<input type="checkbox"/>	Ladders	<input type="checkbox"/>	Specific Reports (Required by Environmental Regulation) on Toxic or Hazardous Chemicals Usage and Storage
<input type="checkbox"/>	Drinking Water	<input type="checkbox"/>	Lead Paint		
<input type="checkbox"/>	Electrical	<input type="checkbox"/>	Lockout / Tagout		
<input type="checkbox"/>	Emergency Response to Spills and Releases	<input type="checkbox"/>	Management of Hazardous Materials and Hazardous Solid Wastes	<input type="checkbox"/>	SHASP, Emergency Planning and Response Plan
<input type="checkbox"/>	Environmental Assessments	<input type="checkbox"/>	Overhead Power Lines	<input type="checkbox"/>	Wastewater Discharges
<input type="checkbox"/>	Excavations and Trenches	<input type="checkbox"/>	Permits (Excavations, Scaffolding, Demolition, Traffic, Confined Spaces, etc.)	<input type="checkbox"/>	Vehicle and Heavy Equipment
				<input type="checkbox"/>	Other:

**Protection of the Public:**

<b>Additional Project Concerns:</b>		
<b>Attendees:</b>		
<b>Name</b>	<b>Title</b>	<b>Company</b>

*Subcontractor Competent Person Form*

## PARSONS

### Subcontractor Competent Person Form

#### Definition

A competent person is a person having the ability to recognize existing and predictable hazards and having the authority to correct them.

#### Responsibility

The designated subcontractor competent person is responsible for recognizing and correcting SH&E risks/hazards. This person has the authority to stop work in a potential SH&E concern on the jobsite. This Subcontractor Manager and competent person are considered the contacts for Parsons projects.

This form must be completed by each subcontractor's manager and the subcontractor's designated competent persons. *Where a subcontractor is responsible for multiple crafts, it will be necessary to maintain additional designated competent persons and forms.* Each subcontractor on a Parsons project must submit this completed form to the Parsons Construction Manager before beginning work on the project and must update it any time the designated representative(s) changes.

#### Acknowledgment

I, \_\_\_\_\_ representing, \_\_\_\_\_

**Subcontractor Manager (Print)**

**Subcontractor Company Name (Print)**

have assigned \_\_\_\_\_ to be the competent person in the areas indicated below and acknowledge that this individual has been thoroughly trained and is experienced in hazard recognition and has the authority to stop work and correct hazards in the event of a potential hazardous or imminent danger situation.

I, \_\_\_\_\_ acknowledge that I have been thoroughly trained and have the experience

**Competent Person (Print)**

to perform the duties as the \_\_\_\_\_ competent person in the areas marked below and

**Subcontractor Company Name (Print)**

I understand that I have the responsibility and authority to correct hazards and to stop work in the event of a potential hazardous or imminent danger situation. (Check appropriate items.)

<input type="checkbox"/>	Air Pollution and Emissions	<input type="checkbox"/>	Fall Protection	<input type="checkbox"/>	Resource Conservation
<input type="checkbox"/>	Asbestos	<input type="checkbox"/>	Fire Watch	<input type="checkbox"/>	Respiratory Protection
<input type="checkbox"/>	Bolting, Riveting, and Fitting	<input type="checkbox"/>	First Aid and CPR	<input type="checkbox"/>	Rigging
<input type="checkbox"/>	Buried Items	<input type="checkbox"/>	HAZWOPER (initial and annual refresher)	<input type="checkbox"/>	Scaffolding
<input type="checkbox"/>	Concrete, Forms, and Shoring	<input type="checkbox"/>	HAZWOPER Supervisor	<input type="checkbox"/>	Spotter (vehicle backing)
<input type="checkbox"/>	Cranes and Derricks	<input type="checkbox"/>	Hearing Protection	<input type="checkbox"/>	Surveying



<input type="checkbox"/>	Demolition	<input type="checkbox"/>	Ladders	<input type="checkbox"/>	Surveying
<input type="checkbox"/>	Drinking Water	<input type="checkbox"/>	Lead	<input type="checkbox"/>	Traffic Safety (Signage, Flagger)
<input type="checkbox"/>	Electrical	<input type="checkbox"/>	Marine Work and Diving	<input type="checkbox"/>	Tunnels and Shafts
<input type="checkbox"/>	Emergency Response (Spills, etc)	<input type="checkbox"/>	Material and Personnel Hoists	<input type="checkbox"/>	Underground Construction
<input type="checkbox"/>	Environmental Assessments	<input type="checkbox"/>	Mechanical Demolition	<input type="checkbox"/>	Wastewater
<input type="checkbox"/>	Excavations and Trenches	<input type="checkbox"/>	Protected Ecological and Cultural Resources	<input type="checkbox"/>	Welding and Cutting
<input type="checkbox"/>	Other (describe):				
<input type="checkbox"/>	Additional Comments:				

\_\_\_\_\_

\_\_\_\_\_

**Subcontractor Manager (Signature)    Competent Person (Signature)    Date**

### Safety Performance Evaluation

1. New Employee Orientation/Training..... 10 pts  
Each employee must receive training on site-specific hazards and procedures on the **first** day of work. For current employees, training should be conducted the first day after this program is established. Training must also include procedures for reporting all incidents and hazards. *(Employees must sign forms stating that they have been trained. 2 points are deducted for every form that is not submitted to the Safety Manager within two days of hire.)*
2. Daily Safety Huddle..... 10 pts  
Every shift begins with a huddle of all workers under your supervision. Review the work to be performed during the shift. Identify the hazards involved and ask everyone to stay focused, use their protective equipment and perform all work safely. *(Spot checks are conducted to ensure that the talks occur. 2 points are deducted for each day that huddles are not conducted.)*
3. Weekly Toolbox Talks..... 10 pts  
A toolbox talk must be completed once each week. Each employee must sign a sign-in sheet which describes the topic discussed. Topics and sign-in sheets can be provided by the Safety Manager. *(Sign-in sheets must be submitted to the Safety Manager each week. 5 points are deducted for weeks in which no sign-in sheet is received.)*
4. Weekly Safety Inspections..... 10 pts  
A weekly inspection is performed using the checklist provided by the Safety Manager. *(Signed, completed checklists are submitted to the Safety Manager weekly. 5 points are deducted for weeks in which no checklist is received.)*
5. Personal Protective Equipment ..... 10 pts  
Each worker under your supervision must wear the personal protective equipment (PPE) required at all times. *(Spot checks are performed to ensure compliance. 1 point is deducted for every violation.)*
6. Housekeeping..... 10 pts  
Work areas must be kept tidy and clear of all obstructions, tripping hazards, scrap, etc. *(Spot checks are performed to ensure compliance. 1 point is deducted for every violation.)*
7. Safety Enforcement..... 10 pts  
Each employee is subject to following Parsons' safety program requirements. A violation notice **must** be issued to the employee for any violations. *(Spot checks are performed to ensure compliance. 1 point is deducted for every violation.)*
8. Report All Incidents ..... 10 pts  
All accidents must be reported to the Safety Manager within one hour. *(2 points are deducted for each late report. Reports over two days late receive a 5-point deduction.)*
9. Meet Safety Goals..... 20 pts

The work is conducted without injury. (*5 points are deducted for a recordable incident. 20 points are deducted for an incident with days away from work.*)

### **Evaluation Results**

Scores are tabulated each month.

- 90-100 pts – Meets expectations
- 80-89 pts – Minor improvements required
- 70-79 pts – Warning/written reprimand
- Below 70 – Unsatisfactory/loss of supervisory duties

***Project Manager Safety Expectations Form***

# PARSONS

## Project Manager Safety Expectations

1. Start-up Planning
  - Prepare project hazard/risk analysis
  - Budget for qualified safety oversight
  - Budget for safety training, incentives, etc.
  - Establish challenging safety goals
2. Lead by Example
  - Personally set the standard for attitude and behavior
  - Act safely at all times
  - Praise safe behavior and apply discipline fairly
3. New Employee Orientation/Training
  - Lead supervisory responsibility and authority
  - START and Zero Injury Techniques
  - Job/site specific hazards/procedures
  - Hazard and incident reporting procedures
4. Activity Hazard Analysis
  - Prepared for all significant tasks
  - Always reviewed prior to task execution
5. Safety Audits
  - Monthly in office, weekly in field
  - System to track corrective actions
6. Personal Protective Equipment
  - Identify equipment and training requirements
  - Develop inspection and maintenance plan
7. Housekeeping
  - Work areas kept tidy
  - Clearly defined standards
8. Ongoing Safety Training/Awareness
  - Maintain safety billboards at project sites
  - Hold regular safety meetings
  - Implement job specific training as needed
9. Subcontractor/Craft Labor Management
  - Include meaningful safety specs in RFPs
  - Establish qualification program
  - Require craft to be trained before arrival
  - Require/review subcontractor safety program
  - Audit subcontractor safety practices
10. Report and Investigate All Incidents
  - Report all incidents including near misses
  - Secure site and photograph immediately
  - Coordinate investigation with Company Safety Manager
  - Review, approve and understand monthly statistics
11. Incentive Programs to Recognize Safe Behavior
  - Encourage immediate recognition of safe behavior
  - Include safety component in any incentive programs
12. Alcohol/Substance Abuse Program
  - 100% Pre-employment screening of employees and subcontractors
  - Post-incident screening required for all incidents
13. Establish and Meet Safety Goals
  - Accident rates
  - Insurance losses
  - Zero regulatory violations or fine



***Safety Meeting Sign-in Sheet***

**PARSONS**  
*Safety Meeting Sign-In Sheet*

Safety Meeting Presenter: \_\_\_\_\_ Date: \_\_\_\_\_

Current Weather Conditions:

Temperature (°F) = \_\_\_\_\_ Wind Direction = \_\_\_\_\_ Wind Speed = \_\_\_\_\_

Clear - Sunny – Cloudy – Rain - Snow      Forecast = \_\_\_\_\_

Current Site Conditions (circle as appropriate):

Dry - Wet - Muddy - Frozen - Snow Covered - Other (describe) \_\_\_\_\_

1. Incidents or Injuries to report from Previous Day Activities: No      Yes      - explain below:

\_\_\_\_\_

2. Safe and/or At-Risk Observations from Previous Day Activities: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Activities Taking Place Today: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. Anticipated Hazards: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Engineering Controls-Work Practices-PPE to Protect Against Hazards: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Additional Safety Topic or Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[illegible]

## COMPETENT PERSON AND ACTIVITY HAZARDS ANALYSIS REQUIREMENTS

This general list may include activities that are not part of this Project.

Safety and Health Requirement	Parsons Safety, Health, and Environmental Manual	OSHA Regulation	EM 385-1-1 Regulation	Competent/Qualified Person	Training Required	Written Plan and AHA Required
General Safety and Health		1926.20	01.A	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Safety Training		1926.21	01.B.01	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Confined Spaces	15	1926.21, 1910.147	06.01	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Confined Space Permit System	15	See above	06.01	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
First Aid and Medical	2	1926.23, 50	03.A	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Fire Protection and Prevention	12	1926.24, 150-155, 352	09.A	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Housekeeping	4	1926.25	14.C	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Illumination	4	1926.26, 56	07.A	<i>Recommended</i>	<i>N/A</i>	<i>N/A</i>
Sanitation	4	1926.27, 51	02.A	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Personal Protective Equipment	6	1926.28, 95-98, 100-107	05.A	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Acceptable Certifications		1926.29		<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Incorporation by Reference		1926.31	Preamble	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Emergency Employee Action Plans	11	1926.35	01.E	<i>Recommended</i>	<i>Yes</i>	<i>Yes</i>
Noise Exposure	7	1926.52	05.C	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Radiation Protection	9	1926.53, 54	06. E&F; 28.A.02	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Gases, Vapors, Dusts and Mists	9	1926.1926.55		<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Ventilation	37	1926.57, 353		<i>Recommended</i>	<i>Yes</i>	<i>Yes</i>



Safety and Health Requirement	Parsons Safety, Health, and Environmental Manual	OSHA Regulation	EM 385-1-1 Regulation	Competent/Qualified Person	Training Required	Written Plan and AHA Required
Hazard Communication	10	1926.59	1.B.06	Yes	Yes	Yes
Process Safety Management	14	1926.64 1910.119		Yes	Yes	Yes
Hazardous Waste Operations and Emergency Response	13	1926.65 1910.120	28.A	Yes	Yes	Yes
Accident Prevention Signs and Tags	16	1926.200	08.A	N/A	N/A	N/A
Signaling	16	1926.201	08.B	Recommended	N/A	Yes
Barricades	16	1926.202		N/A	N/A	N/A
Material Storage	17	1926.250	14.B	N/A	Yes	Yes
Rigging	26	1926.251	15.A	Yes	Yes	Yes
Waste Disposal		1926.252	14.D	Yes	Yes	Yes
Tools	29	1926.300-307	13.A	N/A	N/A	Yes
Gas Welding and Cutting	28	1926.350	10.A	Recommended	Yes	Yes
Arc Welding	28	1926.351	10.E	Recommended	Yes	Yes
Electrical	24	1926.400-415	11.E	Yes	Yes	Yes
General Electrical	24	1926.416	11.A	Yes	Yes	Yes
Lockout Tagout	23	1926.417, 1910.147	12.A	Yes	Yes	Yes
Lockout Tagout Permit System	23	See above	12.A	Yes	Yes	Yes
Maintenance of Electrical Equipment		1926.431	11A	Yes	Yes	Yes
Environmental Deterioration of Electrical Equipment	24	1926.432		Yes	Yes	Yes
Batteries/Battery Charging Equipment	24	1926.441	11.E	N/A	Yes	Yes
Scaffolding	20	1926.450-454	22.A	Yes	Yes	Yes
Aerial Lifts	21	1926.453	22.J and K	Yes	Yes	Yes
Fall Protection	22	1926.500-503	21.A	Yes	Yes	Yes



Safety and Health Requirement	Parsons Safety, Health, and Environmental Manual	OSHA Regulation	EM 385-1-1 Regulation	Competent/Qualified Person	Training Required	Written Plan and AHA Required
Cranes, Derricks, Hoists, Elevators and Conveyors	26	1926.550	16.A	Yes	Yes	Yes
Motor Vehicles, Mechanized Equipment	25	1926.600-603	18.A	Yes	Yes	Yes
Powered Industrial Trucks (forklifts)	25	1910.178		Yes	Yes	Yes
Site Clearing	32	1926.604	31.A	N/A	Yes	Yes
Marine Operations and Equipment		1926.606	16.F	Yes	Yes	Yes
Excavations	33	1926.650-652	25.A	Yes	Yes	Yes
Excavation Permit	33	N/A	N/A	Yes	Yes	Yes
Concrete and Masonry Construction	4	1926.700-706	27.A	Yes	Yes	Yes
Steel Erection	34	1926.750-761 and SENRAC		Yes	Yes	Yes
Underground Construction	30	1926.800	26.A	Yes	Yes	Yes
Caissons		1926.801	26.H	Yes	Yes	Yes
Cofferdams		1926.802		Yes	Yes	Yes
Compressed Air	30	1926.803	26.I	Yes	Yes	Yes
Demolition	32	1926.850-860 inclusive	23.A	Yes	Yes	Yes
Power Transmission and Distribution		1926.950-960 inclusive	11.H	Yes	Yes	Yes
Rollover Protective Structures; Overhead Protection	25	1926.1000-1003 inclusive		N/A	N/A	Yes
Stairways and Ladders Scope	18	1926.1050	21.A	N/A	Yes	Yes
Stairway/Ladder General Requirements	18	1926.1051		Yes	Yes	Yes
Stairways	18	1926.1052	21.E	Recommended	Yes	N/A



Safety and Health Requirement	Parsons Safety, Health, and Environmental Manual	OSHA Regulation	EM 385-1-1 Regulation	Competent/Qualified Person	Training Required	Written Plan and AHA Required
Ladders	19	1926.1053	21.D	Yes	Yes	Yes
Ladder/Stair Training	19	1926.1060		Yes	Yes	Yes
Diving Scope		1926.1071-1072	30.A	Yes	Yes	Yes
Dive Team Quals		1926.1076	30.A.08	Yes	Yes	Yes
Dive Safe Practices Manual		1926.1080	30.A.16	Yes	Yes	Yes
Predive Procedures		1926.1081		Yes	Yes	Yes
Procedures During Dive		1926.1082	30.A.15	Yes	Yes	Yes
Post Dive Procedures		1926.1083	30.A.22	Yes	Yes	Yes
SCUBA Diving		1926.1084	30.B	Yes	Yes	Yes
Surface-Supplied Air Diving		1926.1085	30.A.04	Yes	Yes	Yes
Mixed-gas Diving		1926.1086	30.D	Yes	Yes	Yes
Liveboating		1926.1087	30.A.05	Yes	Yes	Yes
Diving Equipment		1926.1090	30.E	Yes	Yes	Yes
Diving Recordkeeping Requirements		1926.1092	30.A.06	Yes	Yes	Yes
Internal Traffic Control	16	N/A	8.D	N/A	Yes	Yes
Traffic Movement Restriction Times	16	N/A	8.C	N/A	Yes	Yes
Line Breaking	23	1910.119 and 1926.54		Yes	Yes	Yes
Major Material Movements	17	N/A	N/A	N/A	Yes	Yes
Right-of-way Restrictions	16	N/A	N/A	N/A	Yes	Yes
Bicycles/Golf Carts		N/A	18.D	N/A	Yes	N/A
IIPP/SSPP		Cal 3203	Cal 3203	Yes	Yes	Yes

## **APPENDIX B ACTIVITY HAZARD ANALYSIS**

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**Activity Hazard Analysis  
Site Visit or Site Walk**

Activity/Work Task: Site Visit or Site Walk		Overall Risk Assessment Code (RAC) (Use highest code)							
Project Location: USS Lead E Chicago		<b>Risk Assessment Code (RAC) Matrix</b>							
Contract Number:		<b>Severity</b>	<b>Probability</b>						
Date Prepared: 03/06/18			Frequent	Likely	Occasional	Seldom	Unlikely		
Prepared by: Greg Ertel		Catastrophic	E	E	H	H	M		
		Critical	E	H	H	M	L		
Reviewed by (Name/Title): Greg Ertel		Marginal		M	M	L	L		
Employer / GBU: Parsons		Negligible	M	L	L	L	L		
<b>Notes: (Field Notes, Review Comments, etc.)</b> <b>References:</b> PSHEP, ESHARP Manual, CRG SOPs		<b>Step 1:</b> Review each "Hazard" with identified safety "Controls" and determine RAC (See above). <b>The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.</b>							
		<b>"Probability"</b> is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					<b>RAC Chart</b>		
		<b>"Severity"</b> is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					<b>E = Extremely High Risk</b>		
							<b>H = High Risk</b>		
		<b>Step 2:</b> Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					<b>M = Moderate Risk</b>		
					<b>L = Low Risk</b>				
<b>Job Steps</b>	<b>Hazards</b>	<b>Controls</b>					<b>P</b>	<b>S</b>	<b>R A C</b>
		▪							
		▪							
		▪							



Activity/Work Task: Site Visit or Site Walk		Overall Risk Assessment Code (RAC) (Use highest code)		
Project Location: USS Lead E Chicago		Risk Assessment Code (RAC) Matrix		
Site visit/walk	Driving to the site	<ul style="list-style-type: none"><li>Inspect vehicle and make sure it is in good working order with clean windshield, lights, etc. Drive defensively, focus on task do not talk on cell phone or look at documents, park in safe area, look before exiting vehicle, clean up spills</li></ul>	O	M
	Slips, Trips, Falls	<ul style="list-style-type: none"><li>Visitors and new employees will complete site orientation, Quiz and sign-off on HASP</li></ul>		
	Pesronal Security	<ul style="list-style-type: none"><li>Workers will be aware of potentially slippery surfaces and tripping hazards. Do not talk on cell phone or look at documents while walking, focus on task.</li><li>Walk slowly during transit. Jumping, running, and horseplay are prohibited.</li><li>Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls.</li><li>Wear ankle high safety shoes fully laced with good tread, keep hands out of pocket in case of fall. Do not carry more than 50 lbs by yourself, and plan your route.</li><li>Personnel will notify the Client and Site Supervisor of any unsafe conditions, coordinate visit with client and obtain an necessary clearances or badges prior to arrival on site.</li><li>Attend site security briefings and training as per site protocol</li><li><b>Use Buddy system and be aware of surroundings at all times.</b></li><li><b>If you feel threatened by a person or persons, safely leave the area immediately and call 911 and/or the site contact for notification and to allow proper warning of other workers, do not elevate the situation, argue or interact with a threatening person Have a functioning charged cell phone at all times. Possibly have repellant spray readily available when in high risk areas.</b></li><li><b>If you feel threatened by a seemingly hazardous animal (dog, raccoon, bird) safely get into a vehicle and leave the area immediately and call the site contact and/or animal control for notification and to allow proper warning of other workers. Have a functioning charged cell phone at all times. If you cannot safely leave the area, avoid aggressive behavior/movements/stance toward the animal. Have animal repellant spray readily available when in high risk areas. If an animal attacks you, use your arms to prevent bites to the face, chest or throat.</b></li></ul>		

Job Steps (Contd)	Hazards	Controls	P	S	RAC
Working outdoors	Exposure to severe weather	<ul style="list-style-type: none"> <li>Check weather forecast and monitor public announcements</li> <li>Have clothes and gear for weather, seek shelter if severe weather is present</li> </ul>			
Site visit/walk (cont'd)	Sunshine	<ul style="list-style-type: none"> <li>Have sunscreen and safety sunglasses available for ultraviolet protection. Have water for dehydration.</li> </ul>	O	M	M
	Snow	<ul style="list-style-type: none"> <li>Have warm dry clothes available for cold temperatures.</li> </ul>			

Activity/Work Task: Site Visit or Site Walk		Overall Risk Assessment Code (RAC) (Use highest code)		
Project Location: USS Lead E Chicago		Risk Assessment Code (RAC) Matrix		
	Lightning	<ul style="list-style-type: none"> <li>Do not begin or continue work until lightning subsides for 30 minutes. Check weather forecast, reschedule if there is a severe weather warning.</li> </ul>		
	High winds, dust storm	<ul style="list-style-type: none"> <li>Wear goggles if dust/debris is visible. Stop work if vision is significantly impaired or creates unsafe conditions.</li> </ul>		
	Cold and Heat Stress	<ul style="list-style-type: none"> <li>Visitors will dress accordingly to prevent injuries from extreme heat, or cold.</li> <li>FTL or PSM will monitor for cold/heat stress symptoms.</li> </ul>		
	Biological Hazards (ticks, bees, mosquitoes, snakes, etc.)	<ul style="list-style-type: none"> <li>Personnel will be aware of potential exposure to biological hazards.</li> <li>Wear appropriate clothing (hard hat, minimum short -sleeve shirt, long pants, gloves, boots etc.) and insect repellent. (Deet on the exposed skin, Permethrin on clothes) Use Tyvek taped at ankles and wrist if working in vegetation.</li> <li>Do a thorough tick check on clothes and self, seek medical attention if symptoms appear, save tick if removed for potential testing</li> <li>Possibly utilize Technu soap and insect repellents (DEET and permethrin). Long pants will reduce exposure to poison ivy, pant legs will be treated with permethrin and may also be tucked into socks or taped to boots to prevent tick exposure. If ticks are observed on clothing it will be reported to the SSO, any imbedded ticks will be reported immediately and removed with the proper tick removal tool (in all vehicle first aid kits) and saved (folded into tape) for possible examination by doctor. If snakes are observed in residential yards or if work is in overgrown areas snake chaps will be made available as necessary. Daily tailgate meetings will stress tick exposures, snakes, insects and hazardous animals. Keep wasp repellent spray handy</li> </ul>		
	Site Hazards Material Exposure	<ul style="list-style-type: none"> <li>Training and safety awareness of potential exposure to contaminants at the site, including potential for COCs</li> <li>Training of all personnel decontamination procedures (if appropriate to visit). Provide adequate hygiene and decontamination supplies.</li> <li>Practice contamination avoidance, work upwind if feasible, limit contact to the extent possible, and do not eat in areas with COC's, keep drink containers covered.</li> <li>Appropriate PPE will be worn dependent on site conditions and actions levels.</li> <li>Must sign off on health and safety plan.</li> <li>Visitor will be escorted around site by a 40 hour trained individual unless cleared with the Site Manager.</li> </ul>	O	M

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
<p>Level D- Long pants, safety glasses, hard hat (in presence of heavy equipment), steel-toed boots. The following safety equipment is project dependent: long sleeved shirt, gloves, goggles.</p>	<p><b><u>Training Requirements:</u></b></p> <p>All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher.</p> <p>Medical qualification, training and fit-testing must be received on an annual basis for individuals that wear a respirator. If an individual wears a respirator more than 30 days per year, or they are exposed at or above the Permissible Exposure Limit (PEL) of a chemical for more than 30 days in a year, then they must participate in a Medical Surveillance Program as required by 29 CFR 1910.120(f).</p> <p>All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle. All personnel performing work onsite must have received the site specific orientation. Competent FA / CPR / AED responder will be onsite while all work is occurring at all times.</p> <p><b><u>STOP WORK AUTHORITY</u></b></p> <p><b><i>Right, Obligation and Responsibility</i></b></p> <p>Every single employee has the responsibility and the authority to STOP WORK at any time necessary to protect the safety or health of themselves, others, and the environment. Anyone can execute this responsibility without repercussions. We believe that the GOAL OF ZERO is possible with everyone's support and commitment.</p>	<ul style="list-style-type: none"> <li>▪ Inspect job site and staging area and identify any concerns.</li> <li>▪ Inspect job site daily.</li> </ul>



## Activity Hazard Analysis (AHA)

<b>Activity/Work Task:</b> Operating a Motor Vehicle – USS Lead East Chicago	<b>Overall Risk Assessment Code (RAC) (Use highest code)</b>				Low Risk	
<b>Project Location:</b> East Chicago, Indiana	<b>Risk Assessment Code (RAC) Matrix</b>					
<b>Contract Number:</b>	<b>Severity</b>	<b>Probability</b>				
<b>Date Prepared:</b> 3/6/2018		Frequent	Likely	Occasional	Seldom	Unlikely
<b>Prepared by (Name/Title):</b> Greg Beck (Parsons Template)/Environmental Sector Safety Manager, DP-EC specific Drew McGowan	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
<b>Reviewed by (Name/Title):</b> Greg Ertel/Project Manager	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L
<b>Employer/GBU:</b> Parsons/PE&I/Environmental Sector	<b>Step 1:</b> Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all the hazards and fully implementing all controls.					
<b>Notes: (Field Notes, Review Comments, etc.)</b> <b>References :</b> Additions by Curt Burdorf 3-6-2018 Transposed from old format AHA to 2012 format by Drew McGowan PPE- Work gloves & Safety Glasses during inspection, Hi-Vis vest when onsite	<b>P "Probability"</b> is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.	<b>RAC Chart</b>				
	<b>S "Severity"</b> is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					
	<b>Step 2:</b> Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.	<b>E = Extremely High Risk</b>				
		<b>H = High Risk</b>				
		<b>M = Moderate Risk</b>				
		<b>L = Low Risk</b>				



### USS Lead East Chicago Site Specific Safe Driving Practices

- Use the proper vehicle for the task – 4WD required for most activities, keep COCs (soil and ground water samples, purge water) out of passenger compartment, rent pickup trucks when Parsons fleet vehicles are not available, if COCs cannot be kept out of passenger compartment, use plastic sheeting as necessary to prevent cross contamination;
- Place magnetic Parsons logos on rental and personal vehicles operated onsite – Parsons logo helps Grace and Breneman Security staff differentiate Parsons from other contractors performing operations;
- Keep safety kit in all vehicles performing work onsite – min. 2.5lb fire extinguisher, basic first aid kit, eyewash, emergency response plan with route to hospital and emergency contacts – replace first aid as necessary and get fire extinguishers inspected annually;
- Familiarize oneself with the vehicle prior to mobilization if necessary;
- Use strobes (fleet vehicles) or use magnetic LED light bar when vehicles are onsite – roadways are shared with heavy equipment from dredging operations and wear hi-visibility vest at all times;
- When passing through security gates slow and make contact with guard so your presence entering/exiting is noted or stop and sign in with guard, as necessary;
- Minors and pets are not allowed on site.
- All drivers must possess a valid drivers' license, and all personnel in vehicles must present government-issued identification, sign in, and review and sign any safety briefing required;







- All chemicals brought to the site must have prior approval and must be accompanied by the Safety Data Sheet. Inbound delivery driver is responsible for the safety of all passengers and for the stability of material and equipment hauled or handled by their equipment;
- Do not dispose of or release any chemicals, oils, or other materials down drains or to the ground. All spills, no matter how small, must be immediately reported to your contact
- Alcoholic beverages and illegal drugs and prescription drugs with driving restrictions are prohibited. Drivers must not be under the influence and fit for duty;
- The use of any electronic devices including cell phones, blue tooth, hands free, and two way radios is prohibited while driving. Texting while driving is prohibited;
- Seat belts must be worn by all occupants of the vehicle at all times while underway;
- During extreme cold keep engine idling when performing work so a warm up zone is maintained and to prevent being stranded w/o heat if vehicle will not start, use deicer washer fluid, and keep jumper cables onsite;
- Do not park over tall grass that could contact hot exhaust components, stay on established paths as much as possible – rebar and other metal debris capable of damaging tires is located throughout the site;
- Clean vehicle as necessary as heavy accumulation of mud is possible;
- Site speed limit is 10MPH, be aware of heavy equipment from dredging operation sharing site roadways and RR crossings with slow train movements;
- Use caution crossing major streets and entering/exiting the sites during rush hour and watch for pedestrians;
- Parsons Employees shall review the Parsons Corporate Safe Driving Practices and complete the ParsonsU safety module on Defensive Driving.

**Parsons Standard Safe Driving Practices**





Job Steps	Hazards	Controls	P	S	RAC
Accessing in/out of a vehicle	Back strain	<ul style="list-style-type: none"> <li>▪ Entering - place your buttocks in the vehicle seat first and then move your legs into the vehicle.</li> <li>▪ Adjusting Seat – if the vehicle has power/electric seats, then adjust the seat position prior to entering the vehicle. If no power/electric seats, then adjust seat position only while facing forward when sitting in seat, and before securing seatbelt.</li> <li>▪ Exiting – move your legs out of the vehicle first.</li> </ul>	U	N	
	Knee strain	<ul style="list-style-type: none"> <li>▪ Entering – if a vehicle has running boards, then step onto the running board with your left foot first while placing your left hand on the door arm rest and right hand on the steering wheel. Place your right foot into the vehicle and sit on the seat before positioning yourself in front of the steering wheel.</li> <li>▪ Exiting – move your legs out of the vehicle so that your left foot is placed on the running board first. Place your left hand on the door arm rest and right hand on the steering wheel before placing your</li> </ul>	U	N	



	Struck against	<ul style="list-style-type: none"> <li>right foot onto the ground.</li> <li>Note the position of the driver's seat and the distance between the seat and the dashboard or steering wheel to allow access into the vehicle without striking knee/leg. Adjust seat as necessary as stated above.</li> </ul>	U	N	
	Slip/fall	<ul style="list-style-type: none"> <li>Be aware of "black ice" that forms on pavement when the snow melts into water during the day time due to the sun or warmer temperatures, and turns into ice when the sun goes down or temperatures drop below 37 F.</li> </ul>	U	N	
Backing up a Vehicle	Personnel Injury/ Property Damage	<ul style="list-style-type: none"> <li>Physically check behind the vehicle for people, animals or objects before backing up.</li> <li>Look behind while backing and check side view mirrors.</li> <li>Use a spotter whenever possible, or if view is obstructed.</li> <li>Honk horn 2 times if no backup alarm (rental)</li> <li>Always do a walk around before backing</li> </ul>	U	N	
Driving to/from a work location	Vehicle Accident/ Property Damage	<ul style="list-style-type: none"> <li>Complete the ParsonsU safety modules on Defensive Driving</li> <li>Follow the Smith System "Five Keys to Space Cushion Driving" – Aim High in Steering, Get the Big Picture, Keep Your Eyes Moving, Leave Yourself an Out and Make Sure They See You.</li> <li>Complete vehicle inspection before driving and check for proper equipment/supplies. Keep windows, mirrors and eye glasses clean.</li> <li>Adjust seat position and mirrors to reduce the "blind spot" and increase visibility of surroundings.</li> <li>Plan your travel route and check maps for directions, discuss with colleagues or use a GPS system. <b>Note:</b> Follow all manufacturer safety recommendations when using any GPS device, such as using voice guidance, and entering destination data only when the vehicle is stopped.</li> <li>Look ahead for driving hazards and plan a strategy to avoid the hazard. Give yourself plenty of lead time (approx. 15 seconds) when approaching vehicles and objects, position yourself in traffic to minimize risk and leave enough space to react safely.</li> </ul>	U	N	

		<ul style="list-style-type: none"> <li>▪ Keep your eyes on the move - check side view and rear view mirrors every 5-8 seconds. Be alert for signs of other distracted or aggressive drivers.</li> <li>▪ Follow the 4-second rule for maintaining a safe distance when following other vehicles. Before changing lanes, look over each shoulder briefly to check the "blind spot". Make sure other drivers see you – avoid "blind spots", establish eye contact and use lights or horn to increase visibility.</li> <li>▪ Wear sun glasses to reduce sun glare, as needed. Remove sun glasses when driving in tunnels, after dusk or with overcast skies (i.e. cloudy).</li> </ul>			
	Vehicle Accident/ Property Damage (cont'd)	<ul style="list-style-type: none"> <li>▪ Properly secure and/or stow materials, tools and equipment inside and outside vehicles (i.e. trunk, pick up) to prevent shifting or falling off of vehicle. Stack below top of seats in mini-van.</li> <li>▪ Whenever possible, select parking spaces that will allow the vehicle to pull forward in the parking space to increase visibility when pulling out of the space, or back into a parking space.</li> <li>▪ Do not drive through flooded roads and exit at marked locations. Call for assistance if stranded on a flooded roadway.</li> </ul>	U	N	L
	Medical Condition (i.e. heart attack, seizure, etc)	<ul style="list-style-type: none"> <li>▪ Follow habits (i.e. proper diet, exercise, sleep, etc) for maintaining good health and visit your personal physician as appropriate.</li> <li>▪ Consider enrolling in the Parsons Wellness for Life Program.</li> </ul>	U	N	L
	Fatigue/Falling Asleep	<ul style="list-style-type: none"> <li>▪ Get adequate rest prior to driving.</li> <li>▪ Pull over and rest/take a micro break (i.e. 15 minute power nap), if experiencing signs/symptoms of fatigue or drowsiness.</li> <li>▪ Share driving duties with another person.</li> <li>▪ Do not take medications that could cause drowsiness.</li> <li>▪ Stop work</li> </ul>	U	N	L
	Distractions	<ul style="list-style-type: none"> <li>• Stop driving a vehicle, regardless of the speed or location (i.e. 5 mph or on a private road), when the potential of being distracted exists.</li> <li>▪ Drivers are prohibited from using communication devices (i.e. cell phones, PDA, etc) while operating any motor vehicle.</li> </ul>	U	N	L



		<ul style="list-style-type: none"> <li>Avoid performing other tasks that take away your focus while driving (i.e. reading directions/map or newspaper, eating food, writing, looking at passengers while talking, improper use of GPS) - pull over to the side of the road in a safe location.</li> </ul>			
	Smoke/Fire (engine compartment)	<ul style="list-style-type: none"> <li>Pull over to the side of the road in a safe location.</li> <li>Turn off engine.</li> <li>Exit the vehicle and stand a safe distance away from the vehicle and other vehicle traffic.</li> <li>Call for assistance as appropriate (i.e. "911", AAA)</li> <li>Do not open the hood of the vehicle until the smoke has dissipated and there is a fire extinguisher available.</li> <li>Fire extinguishers for minor fires only.</li> </ul>	U	N	
	Foreign Body (eye)	<ul style="list-style-type: none"> <li>Drive with the vehicle windows in the up position, whenever possible.</li> <li>Keep dust/debris free from air vents.</li> </ul>	U	N	
	Unfamiliar vehicle	<ul style="list-style-type: none"> <li>Drive at reduced speeds with the vehicle until the driver is familiar / comfortable with the handling ability of the vehicle.</li> </ul>	U	N	
	Weather /Road conditions	<ul style="list-style-type: none"> <li>Check road and weather conditions prior to driving.</li> <li>Be prepared to adjust driving habits/speed, if road conditions change for the worse (i.e. rain, flooding, snow, fog, etc).</li> <li>Be aware of "black ice" that forms on pavement when the snow melts into water during the day time due to the sun or warmer temperatures, and turns into ice when the sun goes down or temperatures drop below 37 F.</li> <li>Do not use cruise control in the rain, snow, ice or other conditions that can create a slippery road surface.</li> <li>Travel during daylight hours, whenever possible.</li> <li>Give yourself plenty of time to allow for delays due to road construction, work zones, accidents or other unforeseen circumstances.</li> <li>Apply Rain-X or other similar product to windshield to reduce the effect of rain and splashed water onto the windshield.</li> <li>Using headlights or driving lights at all times is recommended, but required when driving during</li> </ul>	U	N	



		inclement weather, when windshield wipers are in use, or traveling through a road construction zone.			
	Impairment	<ul style="list-style-type: none"> <li>Do not take medications that could cause impairment to judgment.</li> <li>A zero tolerance for alcohol consumption prior to and during driving must be maintained.</li> <li>A zero tolerance for using controlled substances prior to and during driving must be maintained.</li> </ul>	U	N	L
	Flat tire/blowout	<ul style="list-style-type: none"> <li>Drive with two hands on the steering for increased control in the event of an unexpected tire blowout.</li> <li>Find a safe place to pull over to the side of the road. Do not park on the shoulder of a busy highway.</li> <li>Do not attempt to change a flat tire without the proper training and physical ability/fitness. Call "911", AAA and/or your supervisor for assistance as appropriate.</li> <li>Install "donut" spare tire on the rear of vehicle. If flat tire is on the front, move a normal sized rear tire to the front.</li> </ul>	U	N	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements
<ul style="list-style-type: none"> <li>Parsons Fleet Vehicle or Rental Vehicle</li> <li>Tire Pressure Gauge, Tire Tread Depth Gauge</li> <li>Work Gloves</li> <li>Air Compressor (If Necessary)</li> </ul>	<ul style="list-style-type: none"> <li>Complete ParsonsU Driver Safety Modules</li> <li>Competency with vehicle inspection items</li> <li>DSR to review DuPont S9G Driving Safety Standard</li> </ul>	<ul style="list-style-type: none"> <li>Daily Vehicle Inspection</li> </ul>

## Activity Hazard Analysis (AHA)

Activity/Work Task:	Excavation, Sampling, Construction	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location:	USS Lead, E Chicago, IL	<b>Risk Assessment Code (RAC) Matrix</b>	
Contract Number:		<b>Severity</b>	<b>Probability</b>
Date Prepared: (mm/dd/yy) 3/1/2018			Frequent    Likely    Occasional    Seldom    Unlikely
Prepared by (Name/Title): Curt Burdoff		Catastrophic	E    E    H    H    M
		Critical	E    H    H    M    L
		Marginal	H    M    M    L    L
Reviewed by (Name/Title): Greg Ertel, CIH, CSP, Program HS Manager		Negligible	M    L    L    L    L
Employer/GBU:	Parsons/ Infrastructure	<b>Step 1:</b> Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all the hazards and fully implementing all controls.	
Notes: (Field Notes, Review Comments, etc.)		<b>RAC Chart</b> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <b>P "Probability"</b> is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.   <b>S "Severity"</b> is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible   <b>Step 2:</b> Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.                         </div> <div style="width: 50%;"> <div style="background-color: #ff0000; color: white; padding: 2px; margin-bottom: 2px;">E = Extremely High Risk</div> <div style="background-color: #ff9900; color: black; padding: 2px; margin-bottom: 2px;">H = High Risk</div> <div style="background-color: #ffff00; color: black; padding: 2px; margin-bottom: 2px;">M = Moderate Risk</div> <div style="background-color: #008000; color: white; padding: 2px;">L = Low Risk</div> </div> </div>	
References:			
HASP, OSHA Standards, EPA Work order, past site experience			

Job Steps	Hazards	Controls	P	S	RAC
Mobilize to site	Traffic accidents/strikes causing injuries or property damage  Slip, Trip and Fall when entering vehicle  Struck by traffic while contractors unload equipment	GOAL get out and look, focus on road, No cell phone use while driving, complete vehicle inspection before mobilizing to site, secure any loads in truck bed (when applicable), use spotter when backing up, be aware of the signs of fatigue and respond accordingly (stop and rest, delay travel until properly rested)  Watch step, use handles on vehicle to assist in entering and/or exiting vehicle, keep truck steps free of debris, mud or ice.  Create good exclusion zones around work area using cones and caution tape, wear proper high visibility clothing. Always use cones around vehicle when parking in street or shoulder of road.	S	M	L
Arriving and approaching residence/ resident		Do not open gates, cross fences or any other barriers to access property/residence. Park only on driveway/appropriate area. DO NOT PARK IN LAWNS.  <b>Work only using the Buddy System.</b>	S	M	L



Job Steps	Hazards	Controls	P	S	RAC
	Aggressive animals/dogs and Aggressive/distressed persons	<p>Whenever possible, select parking spaces that will allow the vehicle to pull forward in the parking space to increase vision when pulling out of the space (or back into a parking space) for safe/easy egress.</p> <p>Be aware of potential danger in the area: persons, dogs, livestock, unusual activities/potential hazardous situations. If the team members do not feel comfortable with situation, leave the area and call the site contact. Approach residences front door/main entrance, knock/ring doorbell, stand away from door and in plain sight of windows or peephole. If no one answers, repeat once. If no contact can be achieved and no consent to perform work is granted do not proceed at that residence.</p> <p>While contacting the resident(s) remain courteous: If the situation is /becomes hostile leave property and notify site manager immediately.</p> <p>Be cautious/aware of residents or others potentially being in possession of firearms and other weapons. In the event the field staff and subcontractors feels uncomfortable or threatened by the situation leave properly and notify the site manager immediately. Use Stop Work Authority.</p> <p>All staff will wear hi-vis vests with Parsons logo and/or Parsons logos clothing and will wear Parsons ID on neckband or clipped to clothing.</p> <p>If you feel threatened by a person or persons, safely leave the area immediately and call 911 and/or the site contact for notification and to allow proper warning of other workers, do not elevate the situation, argue or interact with a threatening person. Have a functioning and charged cell phone at all times. Possibly have repellant spray readily available when in high risk areas.</p> <p>If you feel threatened by a seemingly hazardous animal (dog, raccoon, bird) safely get into a vehicle and leave the area immediately and call the site contact and/or animal control for notification and to allow proper warning of other workers. Have a functioning charged cell phone at all times. If you cannot safely leave the area, avoid aggressive behavior/movements/stance toward the animal. Have animal repellant spray readily available when in high risk areas. If an animal attacks you, use your arms to prevent bites to the face, chest or throat.</p>			
Sampling / Construction (see excavation AHA)	Biohazards: Snakes/Ticks/Spiders/Poison Ivy	All staff will receive a full introduction into local biohazards (snakes, insects and poisonous plants of concern). Technu soap and insect repellents (DEET and permethrin) will be available. Long pants will reduce exposure to poison ivy, pant legs will be treated with permethrin and may also be tucked into socks or taped to boots to prevent tick exposure. If ticks are observed on clothing it will be reported to the SSO, any imbedded ticks will be reported immediately and removed with the proper tick removal tool (in all vehicle first aid kits) and saved (folded into tape) for possible examination by doctor. If snakes are observed in residential yards or if			



Job Steps	Hazards	Controls	P	S	RAC
	<p>Back strain from improper use of shovel</p> <p>Fall into/injure ankle on shallow pothole/slot trench.</p> <p>Contact with utilities – Electric shock;</p> <p>Heat Stress</p>	<p>work is in overgrown areas snake chaps will be made available as necessary. Daily tailgate meetings will stress tick exposures, snakes, inspect borne diseases during higher risk times of year. Keep wasp repellent spray handy.</p> <p>Proper ergonomics, back straight, proper shovel, do not use excessive force or excessive large shovel scoops, take stretch breaks, warmup/stretch before starting work.</p> <p>Barricade areas as needed to isolate the work site. No excavation will be dug deeper than 4'. Do not stand within 2' of unprotected excavation edge. Mark excavations with construction fencing, warning tape or traffic cones.</p> <p>Hand dig as required to expose utilities. Be careful to not use excessive force when plunging the shovel. Soft digging will be completed by licensed plumber familiar with local construction methods and materials. Licensed plumber will contact 811 at all properties where hand digging will be completed. All locations that require installation of slot trenches will have full private utility locates on the property.</p> <p>Project vehicles will be onsite for use as cool down zones as necessary, all vehicles will contain drinking water (chilled in summer). All staff will be trained to identify the signs of heat stress and the necessary precautions/mitigations. Staff are authorized to take rest breaks when they feel necessary based on field conditions. Work may be scheduled to start early avoiding late day heat. Staff will be provided with full brim hats to keep sun off head/neck and fans when necessary.</p>			
Deliveries	<p>Slip, trip and fall</p> <p>Lifting, Back strain</p>	<p>Stay aware of surroundings and changes in terrain. Examine site for debris or slip/trip hazards prior to walk over. Tripping hazards that cannot be removed should be marked and team members should be notified on their location.</p> <p>Use proper lifting techniques, use proper ergonomics and observed lifting limits. Experienced shed delivery vendor is competent in proper method for moving empty shed across property using 6" PVC pipes as rollers. Use shovel as wedge to stop shed from rolling on PVC pipes faster than anticipated – do not use body to stop rolling shed.</p> <p>Wear appropriate PPE and leather gloves and watch for sharp edges on aluminum shed siding.</p>	S	M	L

Job Steps	Hazards	Controls	P	S	RAC
	Hand Lacerations				
Construction activities	Ergonomics/Back Injury	Use mechanical device/hand truck for equipment transportation. Setup work tables for modular construction, take stretch breaks, use kneeling pads, stretch in AM, rotate with other staff, stand and sit – stay active.	S	M	L
	Skin burns (Heat Gun)	Wear appropriate leather gloves while using an electric heat gun to bending/manipulate pipe. Be aware that tip of tool can remain hot after tool is turned off and warn co-workers. Do not set hot tool on plastic sheeting or paper material when hot. No open torches will be needed for scope			
	Hand lacerations	Wear proper gloves. Use appropriate cutting tools for pipes – no fixed blade knives. Be aware of sharp edges on cut brass pipes and pipe threads. Use closed blade tubing cutters. When using cordless circular saw inspect work area to ensure blade clearance under material to be cut, ensure guards are in place, when adjusting saw <b>ALWAYS</b> remove battery to isolate/de-energize tool. Never lean across saw and place arm in the cutting path of the saw, only staff training in the use of power tools will completed associated tasks.			

Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements
-Vehicle: Include fire extinguisher, eyewash, and first aid kit. -Utility locator equipment (GPR Probes, Utility scanner) -PPE: safety vest, safety glasses, gloves (leather/nitriles) Steel/Composite toed boots, Cotton clothing. -Hand tools: pipe cutter, tubing cutter -Cordless power tools: PEX expander, impact driver, circular saw, recip saw	-Certificates of competency from vendors and for all Parsons staff -County/State license from plumbing subcontractors.	-Daily PPE -Daily vehicle inspection -Daily tool inspections

Add Additional rows to the Job Steps, Hazards, and Controls are needed. Add additional pages as needed. Refer to Construction AHAs



# Activity Hazard Analysis (AHA)

Activity/Work Task: Excavation and Soil Handling	Overall Risk Assessment Code (RAC) (Use highest code)					M
Project Location: USS Lead, E Chicago, IL	Risk Assessment Code (RAC) Matrix					
Project Number:	Severity	Probability				
Date Prepared: 3/1/18		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title): Greg Ertel, CIH, CSP	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
Reviewed by (Name/Title): Greg Ertel, Program HS Manager	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L
Employer/GBU: Parsons/INF	Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all the hazards and fully implementing all controls.					
Notes: (Field Notes, Review Comments, etc.)	P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					<b>RAC Chart</b> E = Extremely High Risk H = High Risk M = Moderate Risk L = Low Risk
References : Site HASP, Chemours Standards, OSHA/EPA	S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					

Job Steps	Hazards	Controls	P	S	RAC
Minimum PPE: <input checked="" type="checkbox"/> Safety Glasses <input checked="" type="checkbox"/> Safety Shoes <input checked="" type="checkbox"/> Hard Hat <input checked="" type="checkbox"/> High Vis Vest or Clothes (when near traffic or heavy equipment) <input checked="" type="checkbox"/> Long-sleeved shirt and long pants <input checked="" type="checkbox"/> Gloves Type: <u>nitrile with work gloves based on task</u> Other: Escape respirator as per site requirements PPE should be the "last line of defense" after using substitution, engineering controls, warning labels, work procedures and training					
Opening site gate and working outdoors	Heat or Cold Stress (working outside)	Check weather forecast before starting work. If severe weather is present, consider rescheduling if feasible. Monitor weather throughout the day. Wear work clothes appropriate for weather. Have water available and drink throughout the day. Take breaks in heated or air conditioned vehicle as needed throughout the day. Stop work if heat or cold stress symptoms are present. Monitor temperature and pulse for high risk conditions, comply with site and CalOSHA work/rest restrictions			
	Pinch Points	Wear cut-resistant or leather gloves when handling lock, chain, and gate. Position hands and fingers correctly to prevent pinches or scrapes, mark and/or guard high risk areas	O	M	M
	Slips, trips, and falls	Clear area of any potential slip, trip and/or falls hazards.	O	M	M



## General Site Activities - Excavation

Job Steps	Hazards	Controls	P	S	RAC
		Pay attention to task, do not talk on phone or look at documents while walking. Wear safety shoes fully laced. Keep work area neat and clean, mark all hazardous areas			
Driving on the site and General Traffic Hazards	Driving Conditions	Inspect area surrounding the vehicle and the intended driving path before operating the vehicle. Use a spotter when backing up or driving into difficult areas. Always use a spotter when driving in tight area or when backing.	O	M	M
	Traffic Hazards: Struck by other vehicles, striking other moving/non-moving objects	Proceed slowly to the work area, obeying the speed limit. Use proper signaling. Avoid backing into traffic. Use spotters if necessary to back in and out of work area or to navigate through difficult areas. Establish spotter signaling before proceeding. Utilize traffic safety control devices: vehicle lights, cones, barricades, etc. Avoid driving or parking vehicle within work zone.	S	C	M
	Roadway Obstructions	Roadways must be checked for potholes, ice, nails, sharp objects, puddles, and other obstructions. Clear or mark any hazards in the roadway. Consult with local authorities on Permit Requirements for traffic issues. Prepare and implement traffic control plan, place signs in accordance with permits.	O	M	M
Excavation and Soil Handling	Striking Overhead or Underground Utilities	<p>Verify thorough site clearance has been completed and documented on the Parsons Utility clearance form or equivalent. Conduct visual inspection before starting work, look for overhead hazards and maintain at least 10 feet from overhead lines, greater distance required for high voltage.</p> <p>Perform a site visit and identify observances of and indications of utilities. Indications could include:</p> <ul style="list-style-type: none"> <li>➤ Area lights</li> <li>➤ Phones</li> <li>➤ Drain lines</li> <li>➤ Overhead lines</li> <li>➤ Fire hydrants</li> <li>➤ Fiber optic cable signage</li> </ul>	S	M	L

## General Site Activities - Excavation

Job Steps	Hazards	Controls	P	S	RAC
		<ul style="list-style-type: none"> <li>➤ Manholes</li> <li>➤ Junction boxes</li> <li>➤ Natural gas</li> <li>➤ Observe paving scars such as areas of new pavement or saw cuts</li> </ul>			
	Unstable work area, falling into excavation	Clearly mark out work area near excavation with cones or barriers, do not allow personnel to get within 6 feet of the edge. Control traffic around excavation and use security fence if open to the public. Have a trained and authorized Excavation Competent Person on site if necessary. Conduct and document daily inspections of barricade installation.	S	M	L
	Working around heavy equipment – struck-by hazard	Use trained operators, inspect equipment daily. Maintain at least 10 feet from the farthest reach of the equipment. Do not enter work zone unless acknowledged by the operator and equipment in safe position. Do not walk under elevated loads. Wear high visibility clothing and make yourself visible. Be sure that equipment handlers, truck drivers, and other personnel can see you and area aware of your location at all times. Do not stray from safe work zone if possible.	O	M	M
	Excavation wall collapse	Maximum excavation depth is 4', so slope failure safety is to prevent people from falling from edge failure and other similar injuries. Avoid entering the excavation when possible. If entry is required, verify safe conditions and readily accessible escape paths. Conduct air monitoring before entry with a calibrated meter if necessary, record results and monitor throughout entry.	O	M	M
Potential for Exposure to COC's in soil	Exposure to low levels of metals in soil	Reduce dust generation to the extent possible. Apply water to haul roads, open excavations, truck beds and soil piles as necessary. Cover and secure soil piles as needed to reduce dust generation. Wear PPE appropriate for exposure/task, coveralls required when potential for contact with soil, wear chemical resistant gloves and avoid			

General Site Activities - Excavation

Job Steps	Hazards	Controls	P	S	RAC
		contact. Have decon facilities available, do not drink or eat in work zone, train employees on hazards and controls to reduce exposure. Conduct air monitoring to confirm dust action levels are met as necessary. Employees handling soil will have HAZWOPER training.			

Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements
PPE	HASP orientation and daily tailgate meeting	Inspect PPE
First aid kit, eye wash, fire extinguisher		Keep first aid kit, eye wash, and fire extinguisher accessible
		Inspect vehicle. Check fluid levels, lights, tire pressure, etc.
		Make sure this equipment is accessible and in good condition
Backhoe, Track-hoe or heavy equipment	Trained authorized operator	Daily Pre-Use